

The Effect of Headphone Verses Room Music on Aerobic Performance.

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Listening to faster paced music while performing aerobic activities promotes elevation of personal motivation and faster activity paces. However, limited research is available supporting the improvement of performance while listening to music. **PURPOSE:** To investigate if there is a greater improvement in aerobic performance while listening to music through headphones (H) when compared to room music (R) and no music (C).

METHODS: Twenty three moderately active college aged males and females (age: 21.0 ± 1.1 yrs.) participated in the study. After obtaining baseline measures, each subject performed a 3 km cycle ergometer exercise test under three conditions; H, R, and C. During C condition, no music was introduced while in R condition, music was played through a room speaker at 70 decibel and in H condition, music was played at 70 decibels through noise reducing headphones. Songs were chosen from a pre-selected 25 songs that had a BPM of 125-140 bpm and were then narrowed to the top five scored songs using the Brunels Music Rating Inventory. Heart rate (HR), blood pressure (BP), rate of perceived exertion (RPE) and Syebak and Murgatroyd's felt arousal were measured before, during, and after exercise. At the completion of a 3 km cycle test, exercise time and Physical Activity Enjoyment (PACE) were also recorded. After two minutes of cool down, PACES, Felt arousal, and Tammen's Activation scores were obtained. Using a one-way ANOVA, different music conditions were compared on all measured variables.

RESULTS: Although a trend of decrease in 3 km exercise time was shown in H condition when compared to R and C, one-way ANOVA tests deemed no significant differences in exercise times (380.1 ± 60.5 vs. 382.4 ± 46.7 vs. 395.2 ± 64.6 sec., respectively). No significant differences were observed in any of the physiological measures including, HR, BP, and RPE under these conditions. There was however, a significantly greater interest-enjoyment (from PACES) in H and R conditions when compared to C (3.9 ± 1.3 and 3.7 ± 1.3 vs. 3.3 ± 1.2 , $p < 0.01$). **CONCLUSION:** The results of current findings suggest that even though music does not appear to significantly enhance aerobic performance, moderate intensity aerobic activities can be more enjoyable while listening to music when compared to no music.